RAY ALLEN

PROFESSIONAL K-9 EQUIPMENT

INSTALLATION MANUAL

READ THIS FIRST

Installation of this System should be carried out by qualified persons familiar with the general installation of law enforcement electronics commonly installed on police service vehicles. It is recommended that the installer(s) have updated wiring diagrams and schematics of the specific vehicle in which the System will be installed or have access to wiring information through a local dealership or other source.

If you are replacing an existing deployment and/or heat alert system, remove all previous wiring before beginning installation. Our System requires that wiring connections be made as described in this manual - do not connect this to any other system's pre-existing wires.

Before installation:

1. Confirm all parts and components are included and accounted for by doing a complete inventory of the package contents.

2. Read this manual to familiarize yourself with the system's unique requirements for installation.

3. Observe all safety practices. It is the installer's responsibility to determine, implement, and observe those safety practices.

Please note:

This system is designed to be directly hardwired to the vehicle's 12-volt battery. ***DO NOT CONNECT THE SYSTEM TO THE VEHICLE BATTERY UNTIL ALL CONNECTIONS HAVE BEEN COMPLETED AND VERIFIED AS BEING CORRECT.***

Do not connect this product to any device intended to detect vehicle battery drain. ***DOING SO MAY "POWER DOWN" THIS PRODUCT AND/OR RENDER IT INEFFECTIVE FOR ITS INTENDED USE.***

We recommend that you meet with the intended user to discuss preferences and installation requirements specific to the system's application and user comfort.

RAY ALLEN F[1] Series System™ Inventory

Antenna w/15’ of cable	Qty 1
Heads-Up Display (HUD)	Qty 1
HUD Articulating Mount w/Hardware Pack (4 screws/nuts)	Qty 1
Interactive Intelligent Remote Control/Pager Unit	Qty 1
Remote Control Holster	Qty 2
Remote Charger	Qty 1
HUD/Remote Charging Pigtail	Qty 1
System Control POD	Qty 1
Stainless Steel Gas Push Rod	Qty 1
Stainless Steel Push Rod Brackets	Qty 2
Stainless Steel Hardware Pack (For Push Rod Brackets)	Qty 1
40 lb. 12-Volt Solenoid	Qty 1
Control POD/HUD Communications Cable (Grey)	Qty 1
Temperature Sensor Stubs	Qty 2
Electrical Hardware Pack	Qty 1
POD & HUD Attachment Hardware Pack (8 self-tapping screws)	Qty 1
Power-In Wire Harness	Qty 1
Power-Out Wire Harness	Qty 1
Installation Manual	Qty 1
User’s Manual (To Remain in Car)	Qty 1

Charging the Remote Control/Pager

After unpacking the System we recommend that you immediately charge the Remote Control/Pager. To do this:

1. Locate the Remote Control and Remote Control Charger.
2. Plug the Remote Control Charger into a 110v 60hz receptacle (standard wall plug).
3. Plug the Remote Control Charger into the charging port on the side of the Remote Control.
4. The message *CHARGING BATTERY* will appear on the LCD screen of the Remote Control/Pager along with a charging progress meter.

NOTE: IF THE REMOTE CONTROL BATTERY IS COMPLETELY DEAD IT MAY TAKE A FEW MINUTES BEFORE THE CHARGING SEQUENCE BEGINS.

NOTE: WE HAVE PROVIDED YOU WITH A LONG-LIFE REMOTE CONTROL BATTERY. DEPENDING ON TEMPERATURE, IT CAN TAKE OVER 2 HOURS TO FULLY CHARGE THIS DEVICE. FOR YOUR CONVENIENCE, THE REMOTE CONTROL/PAGER IS PROTECTED BY OVER-CHARGE CIRCUITRY THEREFORE IT CAN REMAIN ON THE CHARGER FOR LONG PERIODS OF TIME WITHOUT FEAR OF BATTERY DAMAGE.

Placement of *RAY ALLEN* F[1] Series System™ Control POD

Before starting your installation, consider the most appropriate placement of the system's Control POD in the interior of the vehicle (the POD design requires that it be located inside of the passenger compartment). Be certain that:

1. Both wire harnesses can easily reach the Control POD as well as their intended point of connection to the vehicle components.
2. The antenna can be attached to the back of the interior rear view mirror and still make connection to the Control POD.
3. The Control POD/HUD Communications Cable can be routed from the Heads-Up Display to the Control POD.
4. The Control POD needs to be securely attached in a well ventilated area in the interior of the vehicle (it does NOT need to be grounded). Use the self-tapping screws included to secure the POD to the front panel of your K-9 insert or attach using 2-sided tape, Velcro® or any other attachment method you choose. Since the temperature sensors for the TEMP ALERT™ function are stubs that are actually on the Control POD, it is important that the Control POD be located in a well ventilated area near the K-9 so that these temperature stubs can accurately reflect the temperature in the K-9 area. Do not locate this Control POD in an enclosed console or in direct sunlight.

All wire harnesses as well as the system antenna are provided with fifteen (15) feet of wire. The POD/HUD Communications Cable is ten (10) feet long.

NOTE: TAKE CARE TO ROUTE ALL WIRES AWAY FROM EXCESSIVE HEAT SOURCES OR POINTS OF POSSIBLE ABRASION.

System Specification & Features

Following are the system input and output descriptions and specifications. Due to the wide variety of vehicles in which this system could be used it is not possible to accurately describe all vehicle connections. Therefore it is up to the installer of this system to correctly locate, connect, and test each connection prior to final power connection and operational testing.

Features

- Reverse battery protection up to 100V
- Load-dump protection up to 100V
- Software over-current protection on all I/O and power outputs
- ±0.5% temperature accuracy
- Frequency hopping spread-spectrum wireless communication with Belt Mounted Remote Control/Pager
- Noise immune RS485 communication with Heads-Up Display (HUD)
- Fan output — off setting and 3 selectable speeds
- Redundant hardware ***and*** software function to disable remote activated Tactical K-9 Deployment System™ when vehicle is in gear
- 100% Solid State Design — no external relays required

Electrical Specifications

Input Voltage	6V – 15V
Max Continuous Output Current (signal outputs)	15A

System Power Wire Harness

- System Power Input (**RED**) - To be connected directly to vehicle 12-volt battery positive terminal
- Door Solenoid Output – 30A max continuous (**ORANGE**)
- Fan Output – 15A max continuous (**BLUE**)
- System Ground (**GREEN**) - To be connected directly to vehicle 12-volt battery negative terminal

Control POD/HUD Communications Cable

- A four conductor CAT3 cable terminated on both ends with an RJ9 crimp plug

Antenna

- Omni directional
- Part 15 compliant
- 15 feet of cable

System Power-Out Wire Harness

Pin #	Wire Color	Signal Name	Signal Description
1	Purple	**Left** Window Output	This signal is connected to the window motor POWER-IN. It supplies an active +12V 15A output signal when the system is rolling down the window. It also acts as a circuit pass-through path when the window is manually controlled.
2	Green - Black Stripe	Neutral Safety Switch Input	This signal input is connected to the vehicle neutral safety wire. Signal should be high resistance when the vehicle is in gear and low resistance when the vehicle is in park or neutral. To bypass this feature, attach wire to ground.
3	N/A	N/A	N/A
4	N/A	N/A	N/A
5	Grey	Aux Output	Inactive — for future use.
6	Orange	Door Unlock Output	This signal is connected to the door lock/unlock solenoid inside the door. It supplies an active +12V 15A output signal when the system is unlocking the door to be opened. It also acts as a circuit pass-through path when the door lock is manually controlled.
7	Blue	**Right** Window Output	This signal is connected to the window motor POWER-IN. It supplies an active +12V 15A output signal when the system is rolling down the window. It also acts as a circuit pass-through path when the window is manually controlled.
8	Purple – Black Stripe	**Left** Window Pass-Through	This signal is connected to the window control switch side of the wire used for Pin #1 in the door. It acts as a circuit pass-through path when the window is manually controlled. ***This wire is not required for Ford product installations.***
9	Grey – Black Stripe	Aux Input	Inactive — for future use.
10	N/A	N/A	N/A
11	N/A	N/A	N/A
12	N/A	N/A	N/A
13	Orange – Black Stripe	Door Unlock Pass-Through	This wire is connected to the door lock control switch side of the wire used for Pin #6 in the door. It acts as a circuit pass-through path when the door lock is manually controlled.
14	Blue – Black Stripe	**Right** Window Pass-Through	This signal is connected to the window control switch side of the wire used for Pin #7 in the door. It acts as a circuit pass-through path when the window is manually controlled. ***This wire is not required for Ford product installations.***

* 150˚C temperature wire

Output Pin Numbering Diagram

14	**13**	**12**	**11**	**10**	**9**	**8**
7	**6**	**5**	**4**	**3**	**2**	**1**

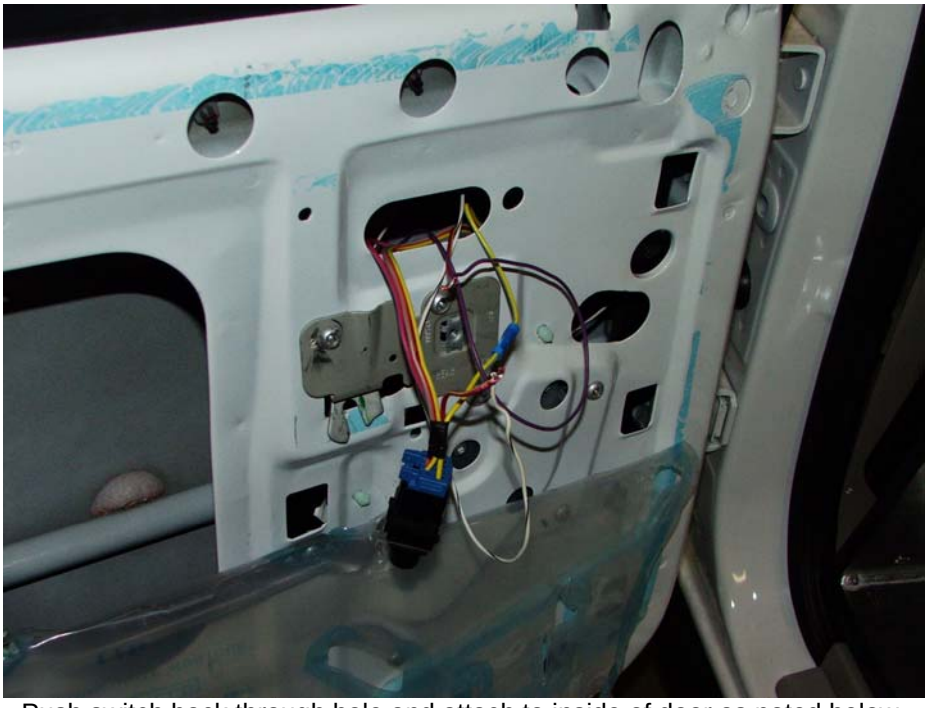
Viewed from wire side

Window Lowering Feature Installation

For installation into Ford Products, disregard this page and use separate instruction sheet for relay installation included with System.

If you wish to connect this feature for use with the Tactical K9 Deployment System™, the wiring harness included with this system has two (2) wires designated for this feature for each side window. These wires should be routed from the 'B' pillar through the conduit to each door. ***Do not*** connect these wires at the driver's side door switch – make the connection inside each door.

To determine the wire in the door used to activate this feature, re-connect the window power switch to the wire harness in the door. Activate the window switch from the driver's door and using a volt-meter, determine the wire that changes from 0 to 12 volts during the lowering of the window. Cut this wire and connect the Window Output wires as listed in the chart above (purple for left / blue for right) to the motor side of this wire. Connect the Window Pass-Through wires listed in the chart above (purple w/black stripe for left / blue w/black stripe for right) to the switch side of this wire. Butt-splices are included for these connections.



Push switch back through hole and attach to inside of door as noted below.

NOTE: AFTER CONNECTING THE WIRE HARNESSES TO THE CONTROL POD, BE SURE TO TEST THE WINDOWS FROM THE DRIVER'S CONTROL TO INSURE WIRES ARE PROPERLY ATTACHED. FINALIZE CONNECTIONS AND SECURE THE WINDOW SWITCH AND THE WIRES TO THE INSIDE OF THE DOOR WITH THE ENCLOSED ZIP-TIES (WE SUGGEST REMOVING ANY STOCK MOLDING FROM THE SWITCH). INSURE THE WIRES AND THE SWITCH DO NOT INTERFERE WITH THE WINDOW TRACK OR ANY LINKAGE IN THE DOOR AND THAT THE DOOR PANEL OF THE VEHICLE K-9 INSERT CAN BE ATTACHED.

Door Unlatch Solenoid Installation

We have included a heavy duty door unlatch solenoid that will give years of trouble free use. Follow the manufacturer's recommendations for installing the door unlatch solenoid.

Be sure to align the solenoid so that the pull/throw of the piston is in a straight line with the motion of the door unlatch mechanism. Also, be sure to avoid any part of the window track or the linkage used in raising and lowering the window.

NOTE: CABLE NEEDS TO BE ADJUSTED SO THAT DOOR LATCH IS FULLY ACTUATED WHEN SOLENOID IS COMPRESSED.

NOTE: BE CERTAIN TO PROPERLY GROUND THE SOLENOID. THE DOOR MAY NOT BE A GOOD GROUND. CONSIDER ROUTING A SEPARATE WIRE FROM THE SOLENOID GROUND WIRE AND ATTACHING IT DIRECTLY TO THE VEHICLE CHASSIS OR BODY.

NOTE: THE ABOVE MOUNTING LOCATION IS ONLY A SUGGESTION FOR PLACEMENT ON A NEWER-MODEL CROWN VIC. WE DO RECOMMEND THAT ON A DODGE MAGNUM OR A CHARGER YOU LOCATE THE SOLENOID DIRECTLY ABOVE THE MID-DOOR BRACKET AND THE WINDOW MOTOR ON A HORZONTAL STRAIGHT LINE WITH THE DOOR LOCK. THE RAY ALLEN CRUISE EZE™ DOOR PANELS ALLOW ENOUGH ROOM FOR THE INSTALATION OF THIS SOLENOID IN THAT LOCATION.

Door Unlock Solenoid Connection

The wiring harness included with this system has two (2) wires designated for this feature. These wires should be routed from the 'B' pillar through the conduit to the same door to which the door unlatch solenoid is installed.

To determine the wire in the door used to activate this feature, locate the stock unlock solenoid located in the door and trace the wires to an accessible point within the door. Activate the door unlock feature from the driver's door. Using a volt-meter, determine the wire that changes from 0 to 12 volts during unlocking. Cut this wire and connect the Door Unlock Output wire as listed in the chart above (orange) to the solenoid side of this wire. Connect the Door Unlock Pass-Through wire listed in the chart above (orange w/black stripe) to the other side of this wire. Butt-splices are included for these connections.

NOTE: BEFORE FINALIZING THESE CONNECTIONS, BE SURE TO TEST THE DOOR UNLOCK FEATURE FROM THE DRIVER'S CONTROL TO INSURE WIRES ARE PROPERLY ATTACHED. FINALIZE CONNECTIONS AND SECURE THE WIRES TO THE DOOR WITH THE ENCLOSED ZIP-TIES. INSURE THE WIRES DO NOT INTERFERE WITH THE WINDOW TRACK OR ANY LINKAGE IN THE DOOR.

NOTE: PLEASE BE SURE THAT YOU UNDERSTAND THE TERMINOLOGY BEING USED HERE. THE UNLATCH SOLENOID IS THE SOLENOID THAT PHYSICALLY ACTUATES THE DOOR HANDLE. THIS SYSTEM PROVIDES THIS HEAVY-DUTY SOLENOID FOR THIS PURPOSE. THE UNLOCK SOLENOID IS A STOCK PART ON ALL VEHICLES WITH ELECTRIC DOOR LOCKS – SUCH VEHICLES COME WITH AN UNLOCK SOLENOID IN EACH DOOR AS STANDARD EQUIPMENT.

Stainless Steel Gas Push Rod Installation

The stainless steel gas push rod should be mounted to the same door to which the door unlatch solenoid is installed. We have included a variety of stainless steel hardware to mount the push rod. Be sure the push rod is mounted so it can push the door as far open as possible but also allow the door to be closed completely. We recommend that the push rod be installed on a very slight downward angle (from cylinder to rod) so that proper lubrication of the pressure seal can take place.

NOTE: LOCATE THE PUSH ROD SO THAT IT IS NOT IN A DANGEROUS POSITION FOR THE K9'S ENTRANCE AND EXIT OF THE VEHICLE. THE PHOTO ABOVE SHOWS A SUGGESTED LOCATION FOR MOUNTING THE GAS PUSH ROD.

Antenna Attachment

The system antenna should be mounted in a vertical configuration to the back (vehicle front) of the driver's internal rear view mirror. Be careful to route the wire in such a manner as to insure that the wire will not interfere with the occupants of the front seat. The cable for this antenna is fifteen (15) feet long.

NOTE: THIS ANTENNA REQUIRES "LINE-OF-SITE" ACCESS TO THE WINDSHIELD AND SHOULD NOT BE BLOCKED. DOING SO WILL REDUCE THE EFFECTIVE RANGE OF THIS DEVICE

Locating the Control POD - Consideration For The Temperature Sensor Stubs

You have been provided with two (2) Temperature Sensor Stubs which are specifically designed to work with this system. These Sensor Stubs will be plugged directly into the system Control POD (the two plugs next to the antenna port – opposite side of the wiring harnesses). Do not plug in the stubs at this time.

With regard to the location of the Control POD, consider:

1. The Control POD needs to be securely attached in a well ventilated area in the interior of the vehicle (it does NOT need to be grounded). Use the self-tapping screws included to secure the POD to the front panel of your K-9 insert or attach using 2-sided tape, Velcro® or any other attachment method you choose. Since the temperature sensors for the TEMP ALERT™ function are stubs that are actually on the Control POD, it is important that the Control POD be located in a well ventilated area near the K-9 so that these temperature stubs can accurately reflect the temperature in the K-9 area. Do not locate this Control POD in an enclosed console or in direct sunlight.
2. Be certain the K9 cannot get to the sensors or the Control POD as neither is chew proof!
3. DO NOT plug in the sensor stubs to the Control POD at this time. Attaching the stubs to the POD will be the one of the last steps in the installation as these sensors need to be configured by the System when it is powered — leave them unplugged for now.

Neutral Safety Switch Connection

If you are installing this unit into a 2003 or newer Tahoe or Yukon, please see separate instructions with the wire included with your System and disregard the first paragraph below.

To properly activate this feature, the system looks for an open circuit to disable the Tactical K9 Deployment System™. Under the dash or somewhere else within the vehicle, locate the wire that reads 0 – 200 Ω (OHMS) when the vehicle is in Park or Neutral and 1000 Ω (OHMS) or higher (or a completely open circuit) when in gear. Carefully splice the green w/black stripe system wire into this circuit.

You can bypass this feature by attaching this wire to a ground. This will allow the Tactical K9 Deployment System™ to operate at ALL TIMES – whether the vehicle is in gear or not. Some handlers request Neutral Safety to be disabled so that option is available to you.

MD10 F Ray Allen Fan Connection (optional)

The Ray Allen MD10 F Fan is designed to bolt directly to either side of the front panel on the Ray Allen Cruise Eze™. Hardware for this installation is included with the Fan. When attaching the Fan to the front panel of your Cruise Eze™, we suggest you insert the bolts and washers from inside of the cage and place the nut on the Fan side. You do not want the nut on the inside of the cage as it has a higher profile than the bolt head and this may injure the dog.

Also included is the wiring to connect directly to the system's Control POD. To complete this connection, attach the fan wire from the Control POD (blue wire of the System Power Wire Harness) to the blue wire on the fan (butt-splices are included for this connection). Connect the black fan wire to a good body ground. Test this connection when testing the complete system. This fan is designed to blow "in" to the Cruise Eze™ unit. If for some reason you wish this fan to blow in the opposite direction, simply reverse these wire connections.

Placement of Heads Up Display (HUD)

The HUD is the user's window into the system for information read-outs and feature programming therefore easy access to the HUD visually and physically is vital. We have included an articulating mount that can be used for this purpose. This mount easily attaches to the HUD using the self-tapping screws included in your hardware pack. Once the location has been determined (we recommend the intended user be involved in this decision) the base of the mount can be permanently attached to the vehicle utilizing the two-sided tape already on the base. This tape is extremely adhesive so you will only get one shot at this.

If you wish to mount the HUD directly to the dashboard as shown below (photo on the right), either attach the HUD using the self-tapping screws or attach with Velcro® or two-sided tape.

NOTE: TAKE CARE TO ROUTE THE COMMUNICATION CABLE AWAY FROM EXCESSIVE HEAT SOURCES OR POINTS OF POSSIBLE ABRASION.

Suggested locations for the HUD:

On top of dashboard.

On facing of dashboard.

NOTE: WE CANNOT STRESS STRONGLY ENOUGH THAT THE INTENDED USER BE INVOLVED IN THE DECISION ON THE LOCATION OF THE HUD UNIT.

Completing the Installation

Insure that all connections are securely attached to the Control POD except for the temperature sensors. Confirm that the communications cable is plugged into the POD and the HUD. Verify that all wire splices and butt-connectors are secure and that there is no chance of a short circuit.

Once all of the above is completed, connect the System's Power and Ground cables to the vehicle battery's positive and negative terminals.

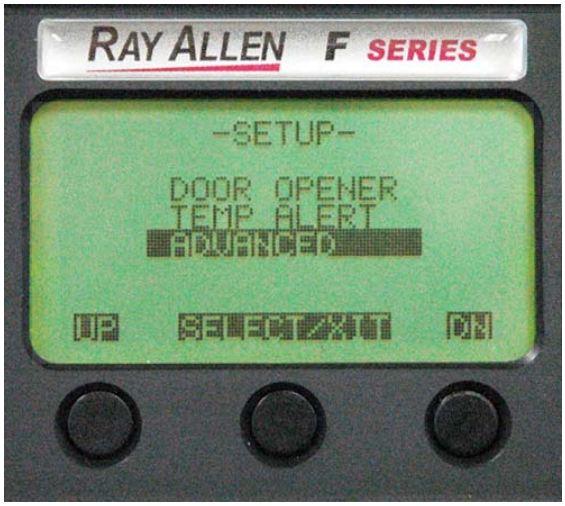
Power up the ***RAY ALLEN*** **F^1 Series System™** by pressing and holding down the center button on the front of the HUD. When the display appears, release the button. The HUD will run a self diagnostic routine. Upon completion of this routine proceed to the following steps.

Configuring the Temperature Sensor Stubs

You are now ready to attach the temperature sensor stubs.

Enter the SETUP Menu by pressing the center button on the HUD one time (do not hold the button down).

Use the up or down buttons to move the cursor to the ADVANCED option and then press and release the center button. Place the cursor on SET UP SENSORS, press & release the center button and then follow the instructions and respond to the prompts on the screen.



The screen will instruct you to attached Sensor 1. Attach one temperature sensor stub at this time (you can plug this into either of the receptacle plugs on the Control POD). This will allow the system to configure Sensor 1. After the system recognizes Sensor 1, it will prompt you to respond on the HUD display (hit OK) and then ask you to unplug this sensor and plug in Sensor 2. Remove the first sensor stub from the Control POD and plug the other sensor stub into the other receptacle plug on the POD (hit OK again). The system will very quickly recognize Sensor 2 and direct you to plug in both Sensor Stubs. Plug the first sensor stub back into the POD and respond to the prompt on the HUD display to complete the installation. The temperature sensors are now configured. The System will automatically return to the ADVANCED Menu.

NOTE: AT SOME POINT YOU SHOULD ATTACH THE CONTROL POD TO THE VEHICLE. IF YOU HAVE NOT DONE THIS YET, YOU CAN DO SO NOW OR AT THE COMPLETION OF THE SYSTEM TEST.

Calibrate the Remote Control/Pager

You now must calibrate the remote to establish initial communication and to insure that the Control POD and the Remote Control/Pager are communicating in the most efficient manner. Before proceeding, insure that the Remote Control has been fully charged (see “Charging the Remote Control” on Page 3).

Start this process on the HUD by selecting Calibrate Remote Control in the ADVANCED Menu.

Turn on the Remote Control/Pager (RCP) by pressing and holding the right button below the LCD display (ON-OFF is molded into the RCP below this button). Once the display responds, release the right button, press and hold the left button, and then very quickly press and hold the right button again.

When the RCP displays LOOKING FOR POD, POD SN and FREQ ADJUST on the screen, release both buttons. After a brief configuration routine as the RCP “finds” the Control POD (and the countdown completes), press and release the right button (ACCEPT) — the display will then show “Building Frequency Tables” and after a few moments the RCP will shut down automatically.

On the HUD press the DONE button and then exit all menus by pressing and holding the center button (you’ll need to exit the ADVANCED Menu and then the SETUP Menu).

When you have exited all menus, the HUD display should show temperatures in the Sensor 1 and Sensor 2 fields, and the D (on the left) and H (on the right) will appear dim with a circle w/line over each letter.

Re-start the RCP by pressing and holding the right button until the display responds then release the button. After a configuration routine, the display will show temperature readings, the signal strength bar and battery condition bar.

Shut down the HUD and the Remote Control/Pager and then restart both (HUD first) to finalize all configurations.

NOTE: IT IS RECOMMENDED THAT THE SYSTEM BE FULLY TESTED BEFORE BEING PUT INTO SERVICE. INSURE THAT ALL CONNECTIONS HAVE BEEN CONFIRMED. CONTINUE ON TO THE TEST.

You are now ready to test **The *RAY ALLEN* F[1] Series System™**

Testing the TEMP ALERT™ System

For this test it is important that all vehicle windows are closed.

Start the vehicle and power up the HUD and the Remote Control. Be sure the vehicle emissions are properly ventilated from the garage or that this test is conducted outside in a well ventilated area. Check that both the HUD and the Remote Control show “SYS OK”. Be sure that the fan is set to OFF (level 0).

In the SETUP Menu, select TEMP ALERT, then set the system values as follows (refer to the Users Manual if necessary):

TEMP ALERT	**“ON”**
TEMP MODE	**“F”**
ALERT TEMP	**“70”**
ALERT DELAY	**“01”**

Exit the SETUP Menu. On the HUD display, insure that the H on the right side of the LCD is now bold without a circle w/line over it (if it is not bold, wait one minute for the Alert Delay to complete).

If necessary, turn on the vehicle heater and adjust to high to raise the interior temperature of the vehicle as quickly as possible. When the interior of the vehicle reaches 70F and BOTH sensors indicate 70F, the following will happen:

1. The system will send a page to the Remote Control/Pager.
2. The HUD will display ALERT! — HIGH TEMP ALERT.

The Remote Control will alert the user by:

1. Making alternate audible tone and vibrating sequences (if mute has been activated on the Remote Control, no audible tone will be heard).
2. The Remote Control's LCD display will read ALERT! — HIGH TEMP ALERT.

The TEMP ALERT™ can be reset by pressing the RESET button once on the Remote Control or the HUD. The audible/vibration alert will delay for one (1) minute (the amount of time set as the ALERT DELAY) or until the interior of the vehicle has lowered to a temperature below the ALERT TEMP setting in the TEMP ALERT™ menu.

NOTE: WHEN THIS TEST IS COMPLETED SUCCESSFULLY, WE SUGGEST THAT YOU RESET THE ALERT TEMP TO 85F.

Now it is time to move on to the K9 Deployment test.

Testing the Tactical K9 Deployment System™

In the SETUP Menu select the DOOR OPENER option, then set the system values as follows (refer to the Users Manual if necessary):

DOOR OPENER "ON"
WINDOW DROP "BOTH"

Exit the SETUP Menu. On the HUD display, insure that the D on the left side of the LCD is now bold without a circle w/line over it.

Be sure the vehicle is parked far enough away from other vehicles so that when the Tactical K9 Deployment System™ is activated, the door being opened doesn't impact anything. Insure that the vehicle is in Park or Neutral (if the Neutral Safety feature is enabled).

Leave the door open but force the door latch shut with a screwdriver or similar instrument. Press the Deploy K-9 button located on the back of the Remote Control.

The following will happen:

1. The system will unlock the door.
2. The system will then automatically activate the door unlatch solenoid.
3. The door latch will open.
4. The Remote will beep twice and vibrate once to acknowledge Deployment activation.
5. The windows that have been wired into the system will lower — if both windows are wired, the left window will lower first and then the right window

Perform this action several times to insure the door unlatch solenoid cable is properly adjusted.

Now test the system by fully closing the door and performing the test again. If the installation was successful, the door will unlock & unlatch in less then one (1) second and the door will open smoothly without binding.

For safety purposes and to be sure all solenoid connections are properly adjusted, it is advisable to test the system several times before completing the installation of the door panels and putting the unit into service. Do so by performing the above test several times from a variety of distances to gain confidence in the installation. Also, lower and raise the windows a few times to insure the wiring inside the door is clear of all moving parts.

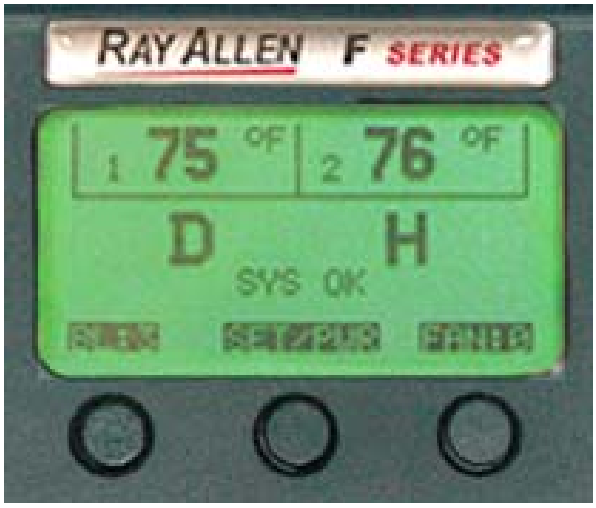
NOTE: IF THE NEUTRAL SAFETY SWITCH FEATURE IS BEING USED, THE DOOR UNLATCH SOLENOID WILL ONLY ACTIVATE IF THE VEHICLE SHIFT LEVER IS IN PARK OR NEUTRAL. TEST THIS FEATURE TO BE CERTAIN. IF THE DOOR UNLATCH SOLENOID ACTIVATES WHILE THE VEHICLE SHIFT LEVER IS IN ANY POSITION OTHER THAN PARK OR NEUTRAL, THE NEUTRAL SAFETY SWITCH WIRE FROM THE POD WAS NOT PROPERLY CONNECTED OR THE WRONG WIRE IN THE VEHICLE WAS USED.

NOTE: ALSO, IF THE NEUTRAL SAFETY SWITCH FEATURE IS BEING USED, THE BOLD "D" ON THE LEFT SIDE OF THE HUD DISPLAY AND RCP WILL DIM AND HAVE A CIRCLE WITH A LINE THROUGH IT OVER IT WHEN THE VEHICLE IS PUT INTO GEAR. ON RETURN TO NEUTRAL OR PARK, THE "D" WILL BECOME BOLD AGAIN.

NOTE: AFTER THE TEST IS COMPLETED SUCCESSFULLY, WE SUGGEST THATYOU RESET THE WINDOW DROP OPTION IN THE DOOR OPENER MENU TO "OFF".

Confirm the Displays and That The System is Fully Operational

Once the system is fully tested and operational, the HUD display will look similar to the photo below (with the actual temperature readings from your vehicle).



Verify the following:

The HUD shows two (2) Temperature Displays ☐

A bold "D" appears on the left side of the display ☐

A bold "H" appears on the right side of the display ☐

System Status is "SYS OK" ☐

Test the Backlight (BL) function ☐
(Do so by pushing the left button on the HUD. The LCD display should change according to the settings from 0 – 3 with 3 the brightest.)

Test the Fan function ☐
(Do so by pushing the right button on the HUD. The fan must be connected to the Control POD and properly grounded in order to function.)

Confirm the Displays and That The System is Fully Operational (continued)

Once the system is fully tested and operational, the Remote Control/Pager display will look similar to the photo below (with the actual temperature readings from your vehicle).

Verify the Following:

The Remote Control Makes Connection W/System ☐

The Remote Control Displays Two (2) Temperature Readings ☐

A bold "D" appears on the left side of the display ☐

A bold "H" appears on the right side of the display ☐

System Status is "SYS OK" ☐

Signal Strength Is Maximum (Left Vertical Bar) ☐

Battery Level Is Maximum (Right Vertical Bar) ☐

Notifications From The Interactive Intelligent Remote/Pager

Displayed Message	Event Description	Audible/Tactile Feedback
ALERT! HIGH TEMP ALERT	The in-vehicle temperature has exceeded the alert temperature at both sensors.	Continuous alternating vibrator and beeper (No beeper if 'MUTE' is enabled).
ALERT! VEHICLE POWER	The vehicle battery voltage has dropped below 12.2 volts.	Continuous alternating vibrator and beeper (No beeper if 'MUTE' is enabled).
LOW BATTERY	The Remote Control battery needs to be recharged to ensure continued operation.	Continuous vibrator cycles.
OUT OF RANGE	The Remote Control has lost synchronization with the RF signal from the Control POD.	No audible or tactile feedback.